

18. (NEW) A device as claimed in claim 6, wherein at least one image of the sequence includes an interpolated image frame (B-frame).

19. (NEW) An apparatus as claimed in claim 11, wherein at least one image of the sequence includes an intra-coded image frame.

20. (NEW) An apparatus as claimed in claim 11, wherein at least one image of the sequence includes a predicted image frame (P-frame).

21. (NEW) An apparatus as claimed in claim 11, wherein at least one image of the sequence includes an interpolated image frame (B-frame).

22. (NEW) A method as claimed in Claim 1, wherein said encoding comprises encoding at a variable compression rate.

Remarks

Please add new claims 13-22. The following claims 1-22 are currently pending based on the amendment herein.

The Examiner stated that the title of the invention is not descriptive and therefore Applicant has so changed the title to " ENCODED VIDEO IMAGE FORMATTING ". If the Examiner still feels that the title is not descriptive, Applicant would gratefully appreciate a suggestion for guidance or for a title from the Examiner.

The Examiner rejected claims 1, 3-12 under 35 U.S.C. §102(b) as being anticipated by Kawamura *et al.* (5,621,840).

The Examiner rejected claim 2 under 35 U.S.C. §103(a) as being unpatentable over

35 U.S.C. §102(b)

The Examiner alleges that “[r]egarding claim 1, Kawamura *et al.* discloses a MPEG recording/reproducing device that records data blocks (col. 8, lines 10-17) and outputs data blocks to produce a sequence of video images in figures 17 and 18. Kawamura *et al.* discloses that MPEG coding codes data in I, P, and B frames; and I frames are coded without reference to other frames; and P and B frames coded in reference to other frames (col. 3, lines 1-12). Kawamura *et al.* also discloses inserting additional data blocks into the stream, each of the additional blocks carrying data identifying the relative location of the first or only data block of an I frame (col. 7, lines 26-37).”

The Examiner alleges that “[r]egarding claim 6, Kawamura *et al.* discloses a storage device (10) capable of being sequentially read and carrying an encoded (1) sequence of video images in figure 17. As discussed previously in the art rejection of claim 1, Kawamura *et al.* discloses images coded without reference to any other images; images coded with reference to other images; the images formatted into a sequence of data blocks; and with additional data identifying the storage location of the first or only data block of an I frame (figure 19).”

As to claims 1, 6, 11, and 12, Applicant respectfully contends that Kawamura does not anticipate claims 1, 6, 11, and 12 as amended, because Kawamura does not teach each and every feature of claims 1, 6, 11, and 12 as amended. For example, Kawamura does not teach the feature of “formatting at least one image of the sequence into a plurality of data blocks”. The preceding formatting technique is disclosed in the specification on page on page 6, lines 12-14 as follows: “ The formatting operation itself divides the encoded data for each image frame into one, or more usually several, data blocks which would conventionally be output in sequence as a

data block stream.” Based on the preceding argument, Applicant respectfully contends that Kawamura does not anticipate claims 1, 6, 11, and 12 and that claims 1, 6, 11, and 12 are likewise in condition for allowance. Since claims 2 - 4 depend from claim 1 and claims 7 - 10 depend from claim 6, Applicant contends that claims 2 - 4 and 7 - 10 are likewise in condition for allowance.

Conclusion

Based on the preceding arguments, Applicant respectfully believes that claims 1-22, and the entire application, are in condition for allowance and therefore request favorable action. However, should the Examiner believe anything further is necessary in order to place the application in better condition for allowance, or if the Examiner believes that a telephone interview would be advantageous to resolve the issues presented, the Examiner is invited to contact the Applicant’s undersigned representative at the telephone number listed below.

Respectfully submitted,

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APPENDIX A. Identification of amended material

Claims 1, 6, 11, and 12 are amended herein as follows:

1. (AMENDED) A method for formatting a sequence of video images comprising the steps of:
encoding successive images of the sequence according to a predetermined coding scheme
in which some images of the sequence are intra-coded, without reference to any other image of
the sequence, and the remainder are respectively coded with reference to at least one further
image of the sequence;

formatting the encoded data for each image into one or a sequence of data blocks and
outputting a data block stream formed of the data block or blocks from successive ones of the
sequence of video images[;], said formatting including formatting at least one image of the
sequence into a plurality of data blocks;

6. (AMENDED) A storage device capable of being sequential read and carrying an encoded and
formatted sequence of video image frames wherein some images of the sequence are intra-coded,
without reference to any other image of the sequence, and the remainder are respectively coded
with reference to at least one further image of the sequence, and the encoded data for the
succession of image frames is formatted into a sequence of data blocks, with at least one data
block per encoded image frame, with at least one image of the sequence formatted into a plurality
of data blocks, with the stored sequence of data blocks including additional data blocks, with
each such additional data block identifying the storage device storage location of the first or only
data block of an intra-coded image frame.

11. (AMENDED) An encoder apparatus [operable to implement the method of Claim 1, said
apparatus] comprising means for encoding successive images of a video image sequence

according to a predetermined coding scheme in which some images of the sequence are intra-coded, without reference to any other image of the sequence, and the remainder are respectively coded with reference to at least one further image of the sequence;

means for formatting the encoded data for each image frame into one or a sequence of data blocks and outputting a data block stream formed of the data block or blocks from successive ones of the sequence of video images, said formatting including formatting at least one image of the sequence into a plurality of data blocks, said means for formatting being operable to identify intra-coded frames, and being configured to insert additional data blocks in said data block stream, each of said additional blocks carrying data identifying the relative location in the data block stream of the first or only data block of an intra-coded image frame.

12. (AMENDED) A video image player configured to receive and read the sequence of data blocks from a sequentially-readable storage device [as claimed in Claim 6], said storage device capable of being sequential read and carrying an encoded and formatted sequence of video image frames wherein some images of the sequence are intra-coded, without reference to any other image of the sequence, and the remainder are respectively coded with reference to at least one further image of the sequence, and the encoded data for the succession of image frames is formatted into a sequence of data blocks, with at least one data block per encoded image frame, with at least one image of the sequence formatted into a plurality of data blocks, with the stored sequence of data blocks including additional data blocks, with each such additional data block identifying the storage device storage location of the first or only data block of an intra-coded image frame, said player comprising a decoder arranged to receive the stream of data blocks, decode the image data and output a sequence of video image frames, said player being operable to output selected ones of said sequence in a fast-forward or fast reverse mode, the player

comprising means for selecting frames by selecting every N^{th} additional data block and displaying the respectively identified intra-coded image frame.